



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,938

11/03/2006

Wolfram Kunze

08146.0018U1

5678

23859

7590

10/01/2009

Ballard Spahr LLP

SUITE 1000

999 PEACHTREE STREET

ATLANTA, GA 30309-3915

EXAMINER

CAILLOUET, CHRISTOPHER C

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

10/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,938	Applicant(s) KUNZE ET AL.	
	Examiner CHRISTOPHER C. CAILLOUET	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 recites limitations which require that the placement wheel have spring loaded holding elements on the periphery of said wheel for holding module bridges. The drawings and the specification fail to disclose or show how this spring loaded holding element operates to hold the module bridges. It is unclear what part of the holding mechanism is spring loaded; for example, does a spring operate two holding arms to hold the module into place, or does the spring operate a piston that projects outward from the wheel to eject the module onto a desired lamination point? One of ordinary skill would be unsure of which holding elements with a spring component would read or not read upon Applicant's claimed invention given the lack of description of a "spring loaded holding element" in the Disclosure.

Art Unit: 1791

4. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “web” in claim 4 is used by the claim to mean “sections of the placement wheel”, while the accepted meaning is “a continuous piece of material” The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Green et al. (US 6951596).

As to claim 1, Green et al. (Green) discloses a device for applying RFID chips to a web of antennas (Abstract). Green's apparatus comprises of: a dividing device (D) for separating the RFID webstock for lamination; a placement wheel (A) for transporting said chips to a lamination point on a moving support element (500) (Fig. 11-12; column 12, line 57 – column 13, line 23; column 13, lines 50-51).

As to claim 2, Green discloses that pick and place devices with mechanical and/or vacuum grips as well as rotary placers may be used to transfer the RFID's to a desired lamination location.

As to claim 4, the apparatus of claim 1 is taught as seen above. Green discloses that the placement wheel may have recesses for receiving RFID chips to be laminated to the antenna web (Fig. 8; column 11, lines 35-40; column 13, lines 45-47).

As to claim 5, the apparatus of claim 1 is taught as seen above. Green discloses that the dividing device (D) may comprise of a cutter roller (column 12, lines 10-16) .

As to claims 6-8, the apparatus of claim 5 is taught as seen above. Green discloses that a feed unit (608, 650, 652) upstream of the dividing device (D) feeds the RFID webstock to said divider (Fig. 10). The dividing device (D) acts as a pressure ram for pressing the RFID webstock against the placement wheel (A). As seen in the drawings, elements 650 and 652 laterally and vertically guide the RFID webstock to the dividing device (D) (Fig. 10).

As to claim 11, the apparatus of claim 1 is taught as seen above. Green discloses that a belt lamination member/brake (B') may be used to extend the zone of bonding between the antenna and the RFID along the placement wheel (A') (Fig. 13; column 13, lines 27-36).

As to claim 12, the apparatus of claim 11 is taught as seen above. Green discloses that the placement wheel may be accelerated/decelerated to match the speeds of the RFID web and the support web (column 13, line 60 - column 14, line 6).

As to claim 13, the apparatus of claim 11 is taught as seen above. Green discloses that the rotating belt provides elevated pressure and temperatures for curing of the adhesive (Id.).

As to claim 16, the apparatus of claim 1 is taught as seen above. Green discloses the use of a counter roller (B) on the opposite side of the support element (500) for lamination of modules (Fig. 10).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6951596).

As to claim 3, the apparatus of claim 1 is taught as seen above. Green further discloses that the apparatus may be set up to operate on single lanes of RFID webstock (column 14, lines 23-31). It is inherent that the width of the placement wheel would correspond to the width of the RFID chip to be laminated to the antenna web; otherwise, the placement wheel could be either oversized or undersized for the apparatus.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6951596) as applied to claim 1 above, and further in view of Roesner (US 20040192011).

Green fails to disclose whether the feed unit may have form-fitting elements to engage apertures in the module web to move said web in a desired direction. Roesner discloses an apparatus for attaching RFID chips to a web (Abstract). Roesner discloses that the module webs have sprocket holes so that sprockets may engage the web and control the movement of said web in a desired direction (Fig. 3; paragraph 30).

Roesner teaches that the sprocket holes allow for quick and accurate alignment of the web to a desired location without the use of an optical sensor (Id.) It would have been obvious for one of ordinary skill in the art to modify the apparatus of Green with sprocket elements to move a web with sprocket holes because Roesner teaches that such a combination allows for quick and accurate alignment of components without use of optical sensors.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6951596) in view of Middelstadt et al. (US 6893528).

The apparatus of claim 1 is taught as seen above. Green fails to specifically disclose whether the dividing device (D) may be tilted with respect to the placement wheel during the dividing operation. It is the position of the examiner that tilting the dividing device relative to the placement wheel would have been obvious to one of ordinary skill in the art at the time of the invention, because adjusting the components of a system so that said components are in an optimum fit for the environment they are being utilized in would be within one of ordinary skill's technical grasp. Middelstadt discloses an apparatus for applying discrete articles to a web of material wherein the dividing device (20) is tilted relative to the placement device (25) (Fig. 1). It would have

Art Unit: 1791

been obvious to one of ordinary skill in the art at the time of the invention to use a known successful apparatus for applying discrete articles to a web of material, such as the apparatus of Middelstadt wherein the dividing device is tilted relative to the placement device, in the apparatus of Green et al. because such a modification would have been within his technical grasp.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6951596) as applied to claim 1 above, and further in view of Baude et al. (US 7297361).

Green fails to disclose a perforation device for perforating discrete areas between RFID chips on the RFID webstock. Baude et al. (Baude) discloses a method of circuit fabrication on webs. Baude teaches that sag control is important when processing and aligning webs of material (column 10, line 59 - column 11, line 15). One way to achieve sag control/distortion minimization would be to include slits or perforations into the web (Id.). It would have been obvious for one of ordinary skill in the art to include a device for forming slits/perforations into a RFID web in the apparatus of Green because Baude teaches that such perforations would aid in sag control and precise alignment of the RFID web.

12. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6951596) as applied to claim 1 above, and further in view of Roesner (US 7242996).

Green fails to disclose a perforation device for perforating discrete areas between RFID chips on the RFID webstock. Roesner discloses an apparatus for

Art Unit: 1791

attaching RFID modules to antennas (Abstract). Roesner teaches that it is well known in the art to apply an initial cut between RFID's on a webstock, and subsequently making a final cut to separate the RFID's from the webstock when said RFID's are ready to be attached to an antenna (column 3, lines 20-33). Such a technique allows for the separation of good from bad RFID's for lamination (Id.). It would have been obvious for one of ordinary skill in the art to modify the apparatus of Green to include a device for making initial cuts to the RFID webstock upstream of the separation device, because Roesner teaches that such a system allows for better quality control of the process.

Allowable Subject Matter

13. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Although the use of braking devices/plates on the periphery of a wheel is well known in the art, none of the prior art teaches using a braking devices comprising of brake linings and presser elements, with said device coupled with an application wheel for applying modules to a web of material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER C. CAILLOUET whose telephone number is (571)270-3968. The examiner can normally be reached on Monday - Thursday; 9:30am-4:00pm, EST.

Art Unit: 1791

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher C Caillouet/
Examiner, Art Unit 1791

/Mark A Osele/
Primary Examiner, Art Unit 1791
September 29, 2009